

JUNE 2016



# CFPA NEWS

THE CALIFORNIA FIRE PILOTS ASSOCIATION NEWSLETTER



WES SCHULTZ



NEW BOEING 747-400  
SUPERTANKER



THE DEEN OF TANKERS PART 1



ONCE UPON A TIME...  
IN THE WEST



THE WALT  
DARRAN  
AWARD  
2016

## 2016 Fire season

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As you can see, the overall presentation of our newsletter has evolved: after 5 summers of faithful heavy duty, graphic designer Cyril Defever has chosen to concentrate on his own work, writing books and articles. As a result, we are happy to welcome Philippe Laurent as our new designer. Thank you Cyril for all the hard work you've done for us; we are now waiting for your articles, profiles and photos!

If you wish to contribute to our Newsletters with articles, stories, photos, videos, or just want to suggest interesting links, please do. Send us your work in text format (txt, doc, docx, rtf) and photos as jpeg files. (And please, no PDF with your own layout!)

Photos: size 2400 px on the longest side, with your name on the photo (watermark) or in the filename for credit.

**And please, feel free to print the Newsletter and share it around!**



Ladies and gentlemen,

Besides some rain last winter, California Season 2016 promises to be a long, busy and hot one! Don't stay thirsty my friends... hydrate!

Congratulations to Jim Cook, for receiving the International Aerial Fire Fighting "Walt Darran" Award for his contribution to this industry as the creator of the Fire Traffic Area concept and procedure. Since its imple-

mentation, the FTA procedure improved the safety and efficiency of Air Operations tremendously!

In recent years several pilots in our group retired or moved on to different paths; Jim Dunn, Sharky Cornell, Les Koehler, Lee Monson, Ted Mundell, Patty Wagstaff, Bruce Wickert, Russ looney, Lee Donham, Bob DeVinny, Ray DiLorenzo, Lynn McGrew, Bob Forbes, Deen Oehl. Thanks for their contribution, dedication, and their professionalism. I'm sure that once in a while, they'll stop by the Tanker Base to say Hi and keep in touch with aerial fire fighting industry.

Let's not forget and keep Bob Finer and Craig Hunt in our thoughts and their smiles in our memories...

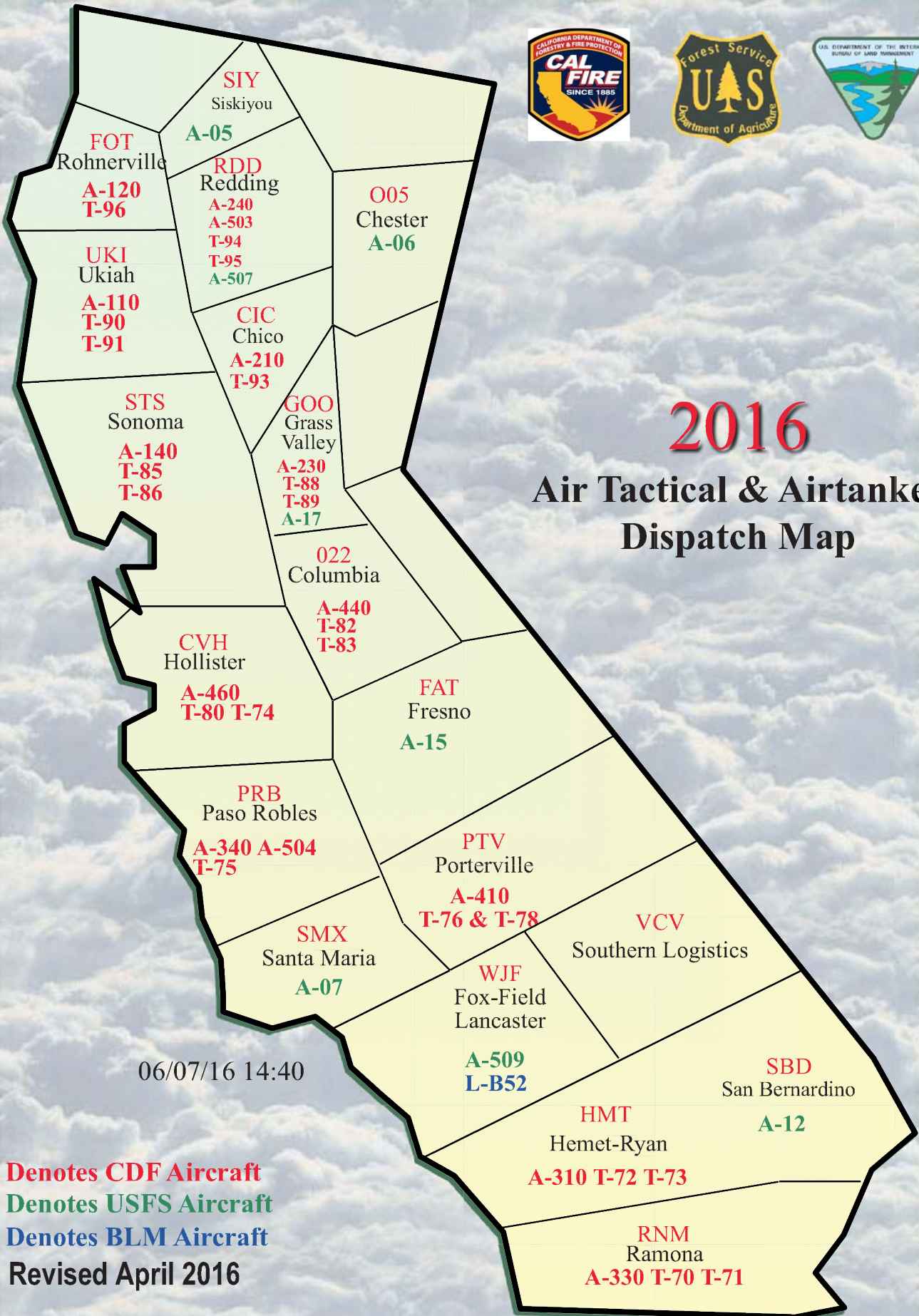
To all the pilots who joined CFPA this year; Welcome aboard! 2016 Tanker Trainees : Jesse Jenks, Jeff Sheffall,.

Good luck! Have a good training. Study hard and fly smooth...

Have a safe fire season,

Jerome  
T85 / CFPA Newsletter Editor





2016

# Air Tactical & Airtanker Dispatch Map

06/07/16 14:40

**Denotes CDF Aircraft**  
**Denotes USFS Aircraft**  
**Denotes BLM Aircraft**  
 Revised April 2016

## 2016 DI/CAL FIRE Air Tactical & Airtanker Deployment Schedule

BASE	TYPE	N-number	TAIL #	CREW	Start	END	Day Off	Relief	Base Mech. & Day Off
ROHNERVILLE FOT	OV10	N413DF	A120	Jim Merryfield	6/14	10/15	Mon	Rick Haagenson	Ron Goepfert
	S2T	N440DF	T96	Erik Hakenen	6/14	10/15	Sun/Mon	Jim Cook (12&2)	Tue
REDDING RDD	OV10	N421DF	A240	Del Schulte	6/14	10/15	Thu	Rick Haagenson	Jon Sortomme Mon
	S2T	N442DF	T94	Tim Daly	6/14	10/15	Thu	Jim Cook	
	S2T	N448DF	T95	Jason Carter	6/14	10/15	Wed	Jim Cook	
	ASM OV10	N470DF	A505	Bob Coward	6/14	10/15	Thu/Fri	12 & 2	
UKIAH UKI	OV10	N410DF	A110	Dane Hackler	6/14	10/15	Tue	Rick Haagenson	Arvin Guico Thu
	S2T	N434DF	T90	Cynthia Anderson	6/14	10/15	Thu	Bill Buckley	
	S2T	N428DF	T91	John Butts	6/14	10/15	Fri	Bill Buckley	
SANTA ROSA STS	OV10	N414DF	A140	Rand Sterrett	6/14	10/15	Wed	Rick Haagenson	Toby Anderson Tue
	S2T	N433DF	T85	Jerome Laval	6/14	10/15	Sat	Bill Buckley	
	S2T	N438DF	T86	Bob Valette	6/14	10/15	Sun	Bill Buckley	
	S2T	Tanker Trainee*							
CHICO CIC	OV10	N402DF	A210	Stef Kudar	6/14	10/15	Mon	Jimmie Bryant	Bill Bumard Sun
	S2T	N450DF	T93	Gary Thomas	6/14	10/15	Sat	Jim Barnes	
GRASS VALLEY GOO	OV10	N408DF	A230	Kirk Chaney	6/14	10/15	Sun	Jimmie Bryant	Ed Lamanna Sat
	S2T	N426DF	T88	Colin Rogers	6/14	10/15	Sun	Jim Barnes	
	S2T	N425DF	T89	Joe Satrapa	6/14	10/15	Mon	Jim Barnes	
COLUMBIA O22	OV10	N401DF	A440	Ken Lancaster	5/9	10/15	Sat	Jimmie Bryant	Butch Hall Fri
	S2T	N422DF	T82	Rich Schlink	5/9	10/15	Thu	T Haagenson/J Kerpa	
	S2T	N424DF	T83	Brian Combs	5/9	10/15	Wed	T Haagenson/J Kerpa	
	S2T	Tanker Trainee*							
HOLLISTER CVH	OV10	N415DF	A460	Scott Fisher	5/9	10/31	Fri	Jimmie Bryant	Kim Myers Sun
	S2T	N445DF	T80	Jim Ferreira	5/9	10/31	Thu	Vito Orlandella	
	S2T	N445DF	T74	Dan Rieger	5/9	10/31	Wed	Vito Orlandella	
PORTERVILLE PTV	OV10	N400DF	A410	Henry Fierro	4/25	10/31	Mon	Chris McGuire	Karl Kiaser Fri
	S2T	N431DF	T76	Brad Baker	4/25	10/31	Tue	T Haagenson/J Kerpa	
	S2T	N436DF	T78	Tom Voorhees	4/25	10/31	Mon	T Haagenson/J Kerpa	
PASO ROBLES PRB	OV10	N418DF	A340	Mark Donnelly	4/25	10/31	Sun	Chris McGuire	Frank Vasquez Wed
	S2T	N444DF	T75	Bob Pixton	4/25	10/31	Tue	Vito Orlandella	
	S2T-OV10	Reserve Pilot		Anne Lebris	5/30	10/31	Tue/Wed	12 & 2	
	A200CT	N463DF	A504	Todd Deline	5/9	TBD	Sat/Sun	12 & 2	
HEMET HMT	OV10	N429DF	A310	Steve Schweizer	4/4	11/30	Tue	Chris McGuire	Travis Bailey/ Scott Stillwell (Prado) Wed/Fri
	S2T	N435DF	T72	Phil Johnston	4/4	11/30	Sun	Billy Hoskins	
	S2T	N437DF	T73	Mike Venable	4/4	11/30	Sat	Billy Hoskins	
RAMONA RNM	OV10	N409DF	A330	John Schaires	4/4	11/30	Wed	Chris McGuire	Rick Schondel Mon
	S2T	N427DF	T70	Cameron Douglas	4/4	11/30	Thu	Billy Hoskins	
	S2T	N432DF	T71	Doug Baker	4/4	11/30	Fri	Billy Hoskins	
	S2T-OV10	Reserve Pilot		Dave Kelly	6/14	10/15	Sat/Sun	12 & 2	
McCLELLAN MCC	S2T	N441DF	T100	SPARE			Airtanker LEAD	Chuck Lees	
	OV10	N403DF	A500	SPARE			Air Tactical LEAD	Todd Deline	
<b>RELIEF PILOT</b>		<b>TYPE</b>	<b>BASES COVERED</b>			<b>START</b>	<b>END</b>	<b>DAY OFF</b>	<b>HOME BASE</b>
Rick Haagenson		OV10	STS-RDD-FOT-UKI			6/14	10/15	Sat	Redding
Jimmie Bryant		OV10	CVH-O22-GOO-CIC			5/9	10/31	Wed	Chico
Chris McGuire		OV10	PRB-PTV-HMT-RNM			4/4	11/30	Fri	Hollister
Jim Cook		S2T	RDD-FOT			6/14	10/15	Fri	Redding
Bill Buckley		S2T	UKI-STS			6/14	10/15	Tue	Santa Rosa
Jim Barnes		S2T	CIC-GOO			6/14	10/15	Wed	Santa Rosa
Trevor Haagenson/John Kerpa		S2T	PTV-O22			4/25	10/31	Sat	Grass Valley/Hemet
Vito Orlandella		S2T	PRB-CVH			4/25	10/31	Sat	Porterville
Billy Hoskins		S2T	HMT-RNM			4/4	11/30	Tue	Ramona
<b>AIR TANKER TRAINEES</b>			<b>BASES COVERED</b>			<b>START</b>	<b>END</b>	<b>DAY OFF</b>	
Jesse Jenks						6/14	10/15		
Jeff Sheftal						6/14	10/15		
Jason Vogt						6/14	10/15		
*NOTE: Air tanker trainees will be required to train at several bases throughout the fire season-a separate schedule will be provided									



FF Chris Krowel, Pilot Jim Merryfield, FF Peter Hewson, FF Cameron Morgan, FF Bill Hancock

## JIM MERRYFIELD - AIR ATTACK PILOT

After attending San Diego State, I very much enjoyed a fulfilling 10 year career as a Paramedic. However, there was a moment about 5 years in that I had a life changing realization. Along with working on a normal ground ambulance, I also crewed a medical life flight. There was one particular "dark stormy night" that changed me forever. While flying to San Francisco, I would often sit in a jump seat that faced forward in the Cessna 421. That night, my nurse partner and I had a particularly troublesome patient who needed much attention. My frustrations were mounting with my tasks at hand. And at the moment I was most exhausted, I looked forward to see two pilots

having the time of their lives up in the front seats! With their headsets on, they had NO idea what was happening a mere foot behind them. That was it! I was to become a pilot.

Next came the usual years of training, instructing and then cargo. I flew a Cessna 402 from Eureka to Ukiah to load boxes, and then on to Sacramento. **every** night in the summer when I taxied by the Cal Fire base in Ukiah, I thought "that is the coolest job flying airplanes".

After my share of throwing Amazon second day air boxes around, I found a job flying a corporate Pilatus and Falcon 50. I learned a ton about corporate fly-

ing, but I also learned it wasn't very fulfilling either. I missed being part of a mission oriented crew. The economy took care of this problem for me and I was furloughed early in the recession.

Then came 8 years flying an air ambulance. My world had come full circle! I was now flying some paramedics that I had trained to be paramedics! I loved the mission, but deep down, I knew I still wanted to join Cal Fire.

I made it! I'm here!

Oh, and by the way...

I'm pretty sure Tim Daly was one of the guys in the front of that 421 on that dark stormy night! He still has no idea!

# HAPPY RETIREMENT!

We wish a happy retirement to our flying legends, Bob Forbes, Tanker pilot at Hemet and Ramona Air Attack Bases, Bruce Wickert, Tanker pilot at Fresno AAB, Les Koehler, Air Attack pilot at Hemet AAB, Ted Mundell, Tanker pilot at Porterville AAB and Deen Oehl, Tanker pilot at Hemet AAB.



- 1- Bob Forbes and Jeff Cavarra (Dyncorp Cal Fire aviation program Manager)
- 2- Deen Oehl and Justin McGough (Hemet-Ryan AAB Battalion chief)
- 3- Les Koeler and Justin McGough
- 4- Bruce Wickert and Jeff Cavarra
- 5- Ted Mundell and Justin McGough
- 6- Tanker 72, Deen Oehl's plane, under airfield firemen water salute for their last flight together!



Photos by Steve Withby

## DEEN OEHL, THE DEEN OF TANKERS

BY DEAN TALLEY



Deen and a B-47

"Not yet. Hold it. Hold it," counseled Deen.

It was a long way down a steep hillside into a narrow canyon with an exit to the West. The lead finally broke right at the end of the retardant line. I waited a few seconds and touched off the load, held the line for a few seconds longer, then turned right trailing the lead. Deen was leaning forward intent on the view through the windscreen. The lead turned right and climbed; we stayed low and flew straight out into clear air.

"We'll check out the drop and let you know how it looks. Load

and return," called the lead.

"It looked pretty good to me," said Deen.

"Better than the last one. At least I had the tank armed," I said.

Deen glanced at me and the crack of a smile appeared.

I've known Deen for over thirty years but I had never flown with him until I was assigned to be his student. He was 80 when we made the run down the canyon just west of Hemet three years ago. Within the spectrum of characters and personalities in the

airtanker business Deen Oehl, Deen-O, is a class act anchoring the position of true gentleman. I don't believe I've ever heard him pass judgment or use an unkind word in reference to an individual although he will give you a critical view of federal firefighting tactics vs. the Cal Fire rapid response and emphasis on Initial Attack.

At an age when most people have spent fifteen or twenty years perfecting their parcheesi or practicing checkers Deen appears to have finally hung up his spurs. To say he has aged well really doesn't do him justice. I've glimpsed bits of his past and met the flamboyant Carmelita but I wanted know more so I asked him to tell me his story.

Deen is second generation from Germany. His grandfather, father, and his fathers' brothers processed meat in San Bernardino. They couldn't compete with the big corporate businesses that had prospered in World War II and after so the family business was not an option. Deen took up flying while completing High School at San Bernardino and some Junior College, earning a private license. The Korean War was on-going and the Air Force was looking for

# TRIBUTE TO DEEN OEHL

Aviation Cadet's. Deen signed up and traveled to Texas and then to Georgia to begin his training in a Super Cub. He was right at home. The next step was a T-6 Texan. After mastering the Texan he moved to Texas stepping into the single engine fighter pipeline at Laredo AFB in the new T-28A. The Air Force liked the T-28A because the cockpit resembled the F-86 although Deen's next ride was a T-33. Meanwhile the Korean War ended.

Next stop Del Rio AFB flying T-33's shooting up targets with a .50 caliber cannon or bouncing bombs off the turf, skip bombing. What could possibly go wrong? Advanced Fighter Tactics training in the F-84 at Luke AFB, Arizona, followed this. As if he wasn't having enough fun, why not go to Bergstrom AFB, Austin Texas and work on air-to-air skills and formation in an F-84F. Meanwhile the momentum of the Korean War pilot pipeline finally began to encounter friction. The F-84F was used as an "External Nuclear Device" delivery, employing the "LABS maneuver" (Low Angle Bombing System): later used with the B-47 for Strategic Air Command, SAC, on



USAF Fighter F-84F (USAF)



Deen in front of a Sabreliner  
(Deen Oehl Collection)

a trial basis. But the chill of the Cold War was changing the strategies and demands of the Air Force. Deen was a little vague about his next transition.

The Air Force Gods placed Deen in the B-47 medium bomber based at March AFB, Riverside, California, his old stomping grounds. His training took place in Wichita Kansas where he was checked out as a co-pilot. The Boeing B-47 was the country's first swept-wing multi-engine bomber. It represented a milestone in aviation history and a revolution in aircraft design. Every large jet aircraft today is a descendant of the B-47. Deen transitioned from one engine to six flying an aircraft equipped

with defenses only in the tail because no fighters could catch it.

While living in an apartment complex in Riverside Deen met Carmelita and Ray Keown. Carmelita was a pretty exotic flower. She had been a performer in the USO in WWII. She sang and danced supporting the troops and later appeared in several movies. When I met her in the 1980's she drove up in a 1983 Excalibur, patterned on a 1930's Mercedes. She wore a floral print and appeared to be, royalty, the reigning queen of Top Mud. When Deen met the couple they owned a Mexican restaurant in Riverside. They became fast friends and later changed the course of his life.

# TRIBUTE TO DEEN OEHL

USAF advanced training plane T-28 (F. Marsaly)



USAF strategic bomber B-52 (F. Marsaly)



Deen qualified as an Aircraft Commander and IP, Instructor Pilot, in the B-47. He flew the B-47 until 1961 when he transitioned to B-52s initially training at Castle AFB, California. In 1958 SAC established strategic wings at Grand Forks AFB, North Dakota, Minot AFB, North Dakota, and Glasgow AFB, Montana. After training Deen reported to his permanent duty assignment in Minot North Dakota. He spent three years at Minot during the hottest part of the Cold War flying B-52s carrying nuclear weapons, missiles, and Top Secret documents outlining what to do if the

Russians attacked. Fortunately Dr. Strangelove was not in charge and Deen didn't have to do a Slim Pickens.

During the Cuban missile crisis in October 1962 the takeoff intervals shrank to 15 seconds for loaded B-52s on alert 24/7, missions lasting 24 hours. Departing Minot they climbed to 30+ thousand feet and flew to New England then headed out to the Atlantic Ocean. The aircraft refueled over the Atlantic going north to and around Newfoundland, northwesterly over Baffin Bay towards Thule Air Base, Greenland,

orbited Thule for several turns, refuel, then departed west across Queen Elizabeth Islands, the North Pole, and on to Alaska. After once again refueling over the Pacific they flew southeast then returned to Minot.

Deen recounted working 24-25 days at a time and spoke of mass takeoffs of B-52s in fifteen second intervals. After ten years the "Who has more fun?" question became more than rhetorical, Deen decided to put in for his resignation from the Air Force to pursue a more entrepreneurial life in California.

Old Chinese saying; "May you have an interesting life." Old gringo saying; "I've got some bad news and some worse news." The Air Force wasn't through with Deen. He got orders to report to C-123 training before traveling to exotic Viet Nam. Meanwhile, back in Riverside, Carmelita and Ray were distraught that their good buddy Deen was not leaving the Air Force to work with them managing a second restaurant. But they still had cards to play.

In their circle of friends from Deen's time at March AFB was General Old. Carmelita and Ray approached General Old of the 15th Air Force Command, and expressed their displeasure with the Air Force decision process. What happens in Riverside stays in Riverside so we will never

# TRIBUTE TO DEEN OEHL

know the details but new orders materialized and Deen was going to the Boeing Plant in Wichita Kansas, Systems Command, Flight Test. This is where the magic happened to B-52s. Airframes were modified with the latest weapons and navigation systems. After modification it fell to the crews to calibrate the weapons systems at bomb ranges in Arkansas and operating out of Fort Smith.

Unlike SAC they were down in the dirt, 150-500 feet. I got the feeling Deen found this more appealing than flying nukes at flight levels. They also tested and calibrated the new "Low Level Terrain Avoidance and Following Radar System" and coupled ILS approach systems. He had a gleam in his eyes recounting

lightly loaded B-52 ILS departures returning to Wichita. "Just bring the nose up to 45 degrees and climb back to cruising altitude."

While at Systems Command Deen was qualified in the B-52 E,F,G, and H models as an Aircraft Commander and IP. His rank was captain but he was often the Aircraft Commander to higher-ranking officers hoping to build time, qualifications or meet flight time minimums. Deen was in charge of scheduling when aircraft were ready to return to squadrons and he liked to write himself in for the California runs. On one flight to Beal AFB his right seater asked if he could take the plane as they approached the Sierras. Deen relinquished the controls. He said the guy started



B-52 (USAF)

his descent right away, eventually terrain following. He buzzed the field at Grass Valley before landing at Beal AFB. It was years later Deen learned his co-pilot on that flight, Dick Miller, had died flying an F7F out of Ukiah working fires. He finally understood they had been buzzing the base that day. Pretty cool when the first time you do a low pass on a tanker base it's in a B-52.

I asked Deen what he preferred flying in the Air Force. He said he would have stuck with single engine fighters but the job at Systems Command held his interest as well. Two years into his tour at Systems Command Deen's resignation was approved. It had been twelve years in the Air Force.

In 1964 Deen started a new career, restaurant manager. Carmelita and Ray opened a new restaurant in Tustin, Orange County, California. Deen worked with their son at the new location. At the time Deen wasn't quite through with the Air Force. He joined a Reserve Squadron at March AFB: they operated C-119s.



Strategic Air Command B-47 (USAF)

# TRIBUTE TO DEEN OEHL

C-119 USAF (F. Marsaly)



After one year he decided the reserve gig wasn't working with his day job but it was a harbinger of the future.

Deen didn't have a lot to say about the restaurant business, his occupation from 1964 until 1979. He said he learned to deal with "the public" but he did not enjoy it. He said dealing with "the

public" was one reason he had no interest in the airlines. It wasn't completely clear to me but Carlmita and Rays' son went on to other endeavors and the second restaurant was closed. Deen continued to work with Ray and Carmelita at the Riverside lo-

cation. At some point they moved from Riverside to Hemet and commuted to work. They left the business in 1979. Another fifteen years had passed and Deen was looking for a third career.

to be continued...

B-52 in flight (USAF)



T-6 Texan (USAF)





# CFPA NEWS





California Department of Forestry and Fire Protection

**CAL FIRE**

2016 FOCUS ON SAFETY



## Ten Standard Fire Orders

### **FIRE BEHAVIOR**

1. Keep informed on fire weather conditions and forecasts.
2. Know what your fire is doing at all times.
3. Base all actions on current and expected behavior of the fire.

### **FIRELINE SAFETY**

4. Identify escape routes and safety zones and make them known.
5. Post lookouts when there is possible danger.
6. Be alert. Keep calm. Think clearly. Act decisively.

### **ORGANIZATIONAL CONTROL**

7. Maintain prompt communication with your forces, your supervisor and adjoining forces.
8. Give clear instructions and ensure they are understood.
9. Maintain control of your forces at all times.

### **IF YOU CONSIDER 1-9, THEN**

10. Fight fire aggressively, having provided for safety first.



# AERIAL FIRE FIGHTING INTERNATIONAL 2016

This year, the International Aerial Firefighting Conference, organized by Tangent Link, was back in Sacramento McClellan. Along an extensive two-day program, speakers covered every aspect of our business. On the morning of the second day, a static exhibition and flight display was held on the airfield. The first public appearance of the brand new Global Supertanker Services Boeing 747-400 was obviously the main highlight of the show, but many other planes and helicopters were not to be missed.

In september, Tangent Link will give you rendez-vous in Adelaide Australia for the Aerial Firefighting Conference ASIA and in spring 2017, the event will take place in Nîmes, France.



Global Supertanker Services new Boeing 747-400 Tanker 944 (see page 18 for full story). (Jim Dunn)



H215 (new name for the former AS332 family) presented by Airbus Helicopters with a charming Tangent Link staff crew.

Former Aero Union Firestar, now Maffs Corp airplane, take off to Chico. (W. Schultz)



Pilatus PC-12 from Colorado Division of Fire Prevention and Control.



Air Sprays's Air Tractors, available with floats or not. (Jim Dunn)



Cal Fire OV-10D Bronco with its new 5 blades propellers. To be used as a Lead Plane in California.

Air Sprays's Air Tractors, available with floats or not.



WES SCHULTZ



Civilian UH-60A Black Hawk from Timberline Helicopters, Idaho. (Jim Dunn)

RJ-85 Tanker 161 from Conair and Aero Flite. (Jim Dunn)



Tanker 83 from Columbia AAB presented by Cal Fire and Dyncorp.

Bombardier 415 SuperScooper from Aero Flite.



WES SCHULTZ

# WALT DARRAN INTERNATIONAL FIREFIGHTING AWARD 2016

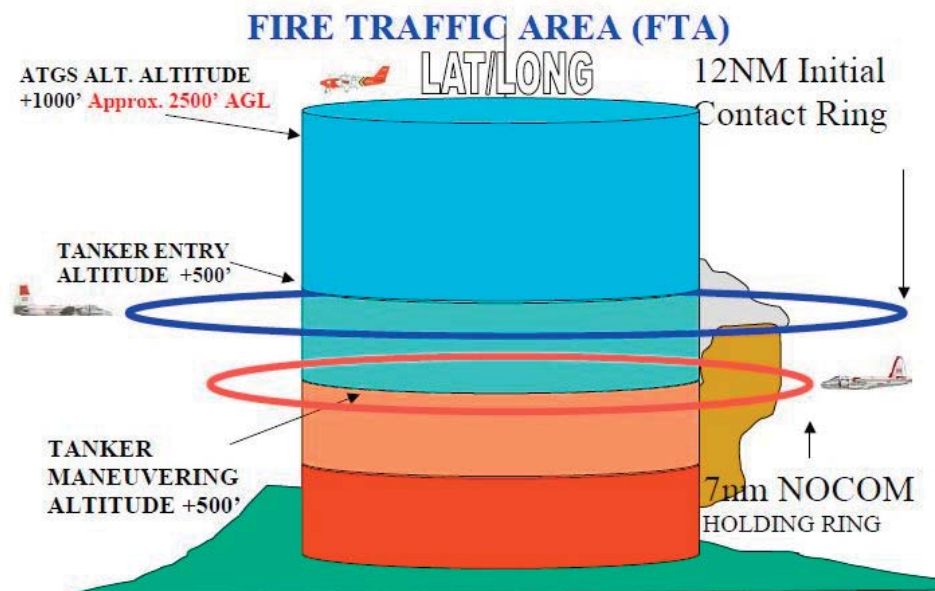


- Tanker pilot Jim Cook, (right) receives his award from the hands of Dave Wardall (CalFire Chief Ret) and AAF board Member, while Tangent Link Chairman Rear Admiral Terry Loughran (left), tells the guests about Jim's career and the Fire Traffic Area concept.

During the event dinner offered to the Aerial Firefighting Conference participants, the third Walt Darran International Aerial Firefighting Award was presented to Cal Fire pilot, Jim Cook.

In 2001, following a tragic in-flight collision between two CDF Trackers, resulting in the death of both pilots, Jim Cook had a deep thought and designed a "Fire Traffic Area", a single airspace system which allows crews of different aircraft involved in firefighting to operate without interfering with each other, thus avoiding any risk of further in-flight collisions. This system has since been adopted for every fire operation in the USA.

It was a giant step for flight safety in firefighting operations and for this, Jim well deserved this Award.



**3 C'S:  
COMMUNICATIONS  
CLEARANCE  
COMPLY**

**DO NOT PENETRATE  
THE FTA IF YOU  
CANNOT COMPLY  
WITH A CLEARANCE**

**NOCOM  
IF COMMUNICATIONS  
ARE NOT ESTABLISHED,  
HOLD AT THE 7NM RING  
UNTIL THEY ARE  
ESTABLISHED!!!**

# NEW BOEING 747 SUPERTANKER

BY FRÉDÉRIC MARSALY, TRANSLATION FRANCK MÉE.

In December 2013, Evergreen International ceased activity. Awkward timing: their Supertanker, which was stored in Marana, Arizona, had just been promised a “call when needed” contract with the US Forest Service. And these last few years, Very Large Air Tankers (VLAT) which had been awarded call-when-needed contracts have proven very useful, and sometimes even more profitable exclusive contracts came after hard-working seasons.

To be a candidate to these contracts, Boeing 747-100 Tanker 979 had to get back in the air, which needed to find turbojets and perform a C check maintenance operation, a full inspection of the airframe, engines and systems. The whole operation would cost an estimated \$1 million; Evergreen postponed the check for a few months... and went bankrupt in the meantime. The aircraft remained in Marana while her owner’s assets were auctioned.

According to the terms of the potential USFS contract, the



GSS Supertanker at McClellan (W. Schultz)



The Boeing 747 JA8086 landing at Hong Kong in 2010. (Peter Bakema)



plane was to yield \$75’000 each day it was activated, plus \$12’000 per flight hour, and fuel and retardant were to be supplied by the federal organization. Even though USFS promises can be fluctuating, these terms were very attractive. Therefore, former Evergreen employees, most of them deeply involved in the Su-

pertanker project, created a new, dedicated company: Global SuperTanker Services, LLC. When Evergreen was liquidated, they bought the pressurized drop system, spare parts and patents. They also acquired a younger, more efficient aircraft: the new Supertanker, third of its kind, is based on a Boeing 747-400.



N492EV waiting in Victorville in early 2015 (Sawas Garozis)

Extract from Evergreen Patent showing the layout of internal tanks inside the first Supertanker.

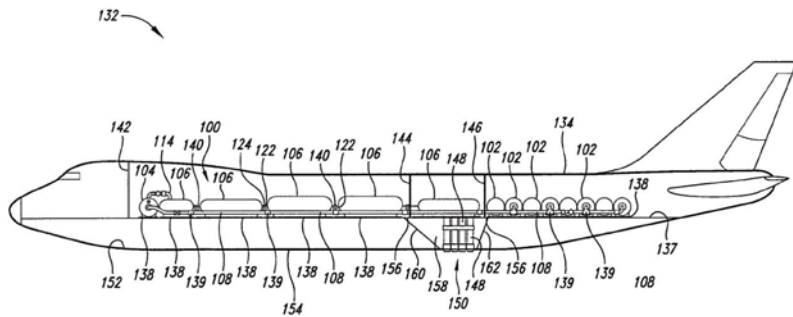


Fig. 3

U.S. Patent

Oct. 26, 2010

Sheet 3 of 11

US 7,819,362 B2

Global SuperTanker Services chose a 747-400 because of its improved efficiency. 25 years have passed since its inception: the time has now come when big airlines start selling aircraft of this type, and airframes which still have some potential become affordable. N744ST has flown 75'000 hours; a properly maintained 747 can log 100'000 flight hours, which lets her some 25'000 hours to live. As a tanker seldom flies more than 500 hours a year, she could remain active for decades.

With new, more powerful engines than the previous Super-tankers, this new aircraft can take-off at a maximum weight close to 400 tons, but she probably won't meet this weight very often in her new career. Therefore, she will have a more favorable thrust-to-weight ratio, which is obviously interesting for this mission. Her more modern conception also implies rationalized maintenance processes, which

N744ST (cn 25308, the 885th 747 to be produced) was built in 1991 as a Boeing 747-446, and first flew on 25 October 1991. Delivered to Japan Airlines the following month and registered JA8086, she would be flying passenger service until 2010. She was then bought as N238AS by AerSale Inc., a company dedicated to second-hand aircraft market, which turned her into a 747-446(BCF) freighter and sold her to Evergreen (as N492EV) in 2012. In November 2013, when Evergreen ceased operations, she was put on storage in Victorville, California.



30 April 2016 in Colorado Springs, the new Super-tanker tanker conduct its first its first ground drop. (GSS)



The first ever drop test from a fire fighting Boeing 747-400 (Anthony Cornelius)

will reduce immobilization times and cost for these essential operations. The 747-400 also has a “glass cockpit”, with standard navigation, systems management and operating systems conceived for a two-man crew, while previous Supertankers needed a flight engineer to face the workload of planes conceived in the late 60s.

After being bought by GSS, N744ST quickly went through a C-check operation in Victorville. On 23 January 2016, she flew to Marana, Arizona, to get her modern, gleaming and spectacular new painting. She was christened Spirit of John Muir, after the famous Scottish-American writer/adventurer — who was also a naturalist and a pioneer in the environmental movement.

Her now permanent base is in Colorado Springs, but her first public display was on 22 March

2016 in Sacramento: she was the great attraction during the Aerial Fire Fighting conference, held on McClellan airfield.

During her painting stay in Marana, the release system taken from the first-ever Supertanker was also installed. This needs a bit of an explanation. During the adventures of Evergreen’s Supertankers, two successive tanks systems were conceived. The first one was made of steel and installed on pallets, so it could easily get in and out through the nose door of a Boeing 747-200F, keeping the multi-purpose abilities of the type. This was not possible for the former passenger 747-100s, so Evergreen conceived a new, lighter, aluminum-built mechanism, which was permanently installed through the side cargo door. When the second Supertanker was stored, the whole system was taken off the

plane... and when Evergreen was liquidated, it was nowhere to be found!

Consequently, when GSS bought Evergreen’s fire fighting assets, it included only the first dropping system, which had been cleanly stored in Marana. So it is this one, cleared of its now useless pallets but retaining its 75’000 liters capacity, which was installed in the new 747-400.

As the release system was already approved by the FAA and the Interagency Airtanker Board in the Forest Service, the adaptation should be by quick and N744ST could be a candidate to operations as soon as this summer. The first ground drops were made on 30 April 2016 and the next day, she made her first test flight and first aerial drop. Her crew consisted of Cliff Hale, GSS chief pilot and more importantly former Evergreen Supertanker captain — the man who



Global Supertanker Services plane at Sacramento McClellan for the AFF2016 conference. (Jim Dunn)

flew more than 90% of trial and demonstration flights, as well as every operational drop. His first officer was Tom Parsons, an experienced tanker pilot who has flown with Neptune Aviation. A third seasoned pilot has also been hired: in the process of extending his type rating, he was put in charge of rough terrain testing.

For most passenger or freight missions, Boeing 747-400s require only a two-man crew, but fire fighting is another deal. GSS invented a third crew member, named Drop System Operator. Bob Soelberg, GSS Vice President and Supertanker program manager, explains: "Global Supertanker has felt from the beginning that both pilots need to be focused on flying and communications, not drop system set up. For that reason, we have

modified the flight deck to allow Don Paulsen, our Chief Safety Officer and former flight engineer, to act as our DSO."

Settled in the center jump-seat, Don Paulsen will be responsible for selecting the proper settings for the retardant release system, according to the situation and the requirements from the authorities, and then tell the pilots when the device is ready to drop. In Evergreen's Supertankers, the flight engineer was in charge of the release system, with some information also displayed on the cockpit's center console; on the new installation, everything was designed to be in the DSO's reach. This new job could be offered to former flight engineers as well as seasoned air mechanics, with a proper DSO training course still to be approved by

the FAA; meanwhile, a second DSO has already been hired and should also be trained as a first officer.

This new aircraft also has important room for improvements. For example, Supertanker operations not only need an airfield with a long and resistant enough runway; they also need an air compressor, necessary to the pressurized release system. GSS thinks about installing two compressors aboard, so the plane would be able to arm her equipment on her own. New wiring was pre-installed for potential new equipments, notably for new data management requirements — thus, the Supertanker could offer a load of technical data about its systems as well as its structure. Yet, these modifications are a future matter and the aircraft currently

Tanker 944 first drop (GSS)



still conforms to Evergreen original STC: according to Bob Soelberg, “some pre-positioning of components will allow us to respond to future requests for various data output. This decision [not to make new installations right now] was based on the lack of clear guidance on which system would be most common among the various agencies, as well as our desire not to delay the FAA STC process.”

When the second Super-tanker came in Châteauroux, France, in July 2009, Evergreen was already considering night operations, thanks to the craft’s ability to drop higher than conventional tankers and avoid risks of flying too close to the ground. GSS is also working this way and has already made some preliminary studies in that regard, analyzing experience from L.A. Fire Department helicopter pilots, who have been flying by night for years. To add night VFR capabilities to the Super-tanker, many evolutions are considered, such as installing

enhanced vision systems or modifying the cockpit so it could be used while wearing night vision goggles. No decision has yet been made, as it is still a long-term evolution project.

Amongst VLATs, the Super-tanker is also unique in being qualified to work on oil spills, Evergreen having entered this market after the Deepwater Horizon disaster: N744ST will be able to release oil dispersant as soon as she’ll be certified. Since the dropping system is made of two individual, parallel, independent 37’500-liter lines of tanks, GSS says she could even work as a fire suppression tool and an oil dispersant vector at the same time. From its base in Colorado Springs, she could reach the Gulf of Mexico within 3 hours and get anywhere in the world in about 20 hours; as says Bob Soelberg: “Our niche is the ability to respond quickly to areas of the world where local capabilities are limited.”

In the near future, certification should not be a problem

and the main question is: will the USFS, which still lacks some fire fighting aircraft, honor the promises made to Evergreen in 2013? That is the hole point, though GSS is also talking to Australia (who has been successfully using one of 10 Tanker’s Douglas DC-10s for the last two years) and to the European Union’s Emergency Response Center.

Evergreen’s history has shown that such a huge plane seldom finds missions big enough for her. Yet, these last few years (and especially the very rough 2015 season) saw very impressive fires and asked for an intensive use of VLATs; particularly, the three DC-10s belonging to 10 Tanker, LLC have proven more than useful. Can the new Boeing 747-400 be a better match for the next years fires? Will the Forest Service follow up on GSS’s arguments? The next few weeks will be decisive for this exciting project.

# ONCE UPON A TIME... IN THE WEST

## KIT ROBINSON

**M**y earliest recollection of aircraft came at a very young age. According to my mother and father it was when I was just six months, to a year old. My parents would take me to our local airport (Reno International Airport) to watch airplanes. They said that it was funny watching my face and eyes light up when a 707 or DC-8 would pass overhead. I looked startled, but never cried, my mother said.

Later on, our house in Sparks (Nevada) was on the eastern base leg into Reno International and I remember watching the Nevada Air National Guard's RF-101 Voodoos returning from a mission, they would fly over the house in groups of two, four, or even eight aircraft.

But it was the sound of the radial engines passing over in the forms of the DC-7s, 4s, PB4Ys, and C-119s heading out or back from fires from the Reno/Stead



Macavia DC-6 Tanker 47. Doyle Fire, Doyle CA. 1987. (Kit Robinson)

Airport (north of Reno) during summer months, that would forever be ingrained in my mind ó putting me on the path of watching and later photographing tankers.

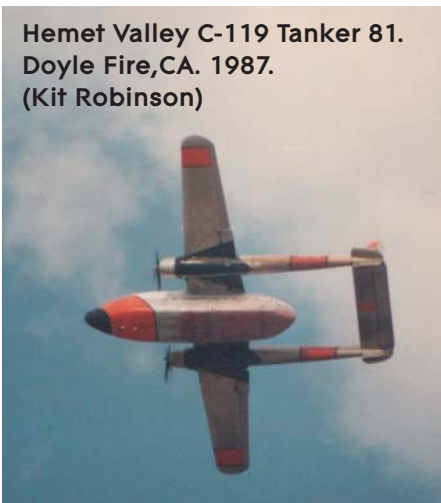
My earliest recollection of tankers was when I was six years old (1972), along with my dad (who was my only form of transportation at that young age) and his old Super 8mm movie camera he liked to pack around with him to film family and other events, including aviation, we came upon a fire in Truckee River Canyon east of Sparks. The fire was on the south side of the canyon just over the ridge line above a rest stop (now closed) on I-80 eastbound. From our location we could not see the drops, but the

sounds of the C-119's as they powered up after the drops and seeing them appear over the ridge farther east, was an experience I will never forget. It was always the sound of the radial engines and, in this case, jet engines, that drew me back each time.

A couple of years later, while visiting family friends in southeast Carson City, Nevada, and directly in the departure path of the Minden-Tahoe Airport, I remember watching DC-7s and 6s pass overhead heading to fires. But it was a late 70's experience that hooked me on air tankers for a lifetime.

My father had pulled off of Highway 395 Southbound north of Reno, near the Red Rock exit so we could watch a small fire

Hemet Valley C-119 Tanker 81. Doyle Fire, CA. 1987. (Kit Robinson)

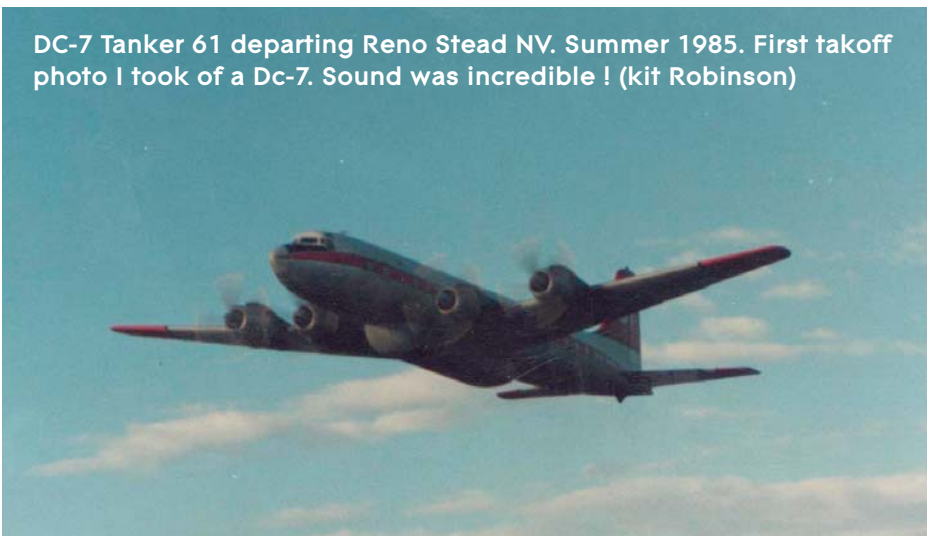




DC-6 Tanker 68 Reno Stead NV. Summer 1985. (Kit Robinson)



KC-97 Tanker 84, captained by Bob West. Reno Stead NV. July 22 1985. Antelope Fire (8,000 acres). (Kit Robinson)



DC-7 Tanker 61 departing Reno Stead NV. Summer 1985. First takoff photo I took of a Dc-7. Sound was incredible ! (Kit Robinson)

which was threatening a home on a hill south of the highway. I remember getting out of the car and just the smell of smoke and the ash hitting my face was something I would take from the experience, but the best was yet to come.

My father yelled out, "Here she comes." I had no idea what he meant, but was soon to find out.

There was a growing rumbling sound and a DC-7 soon materialized from the smoke, it was dropping retardant about 300 yards south of our location. As she screamed by, the sound, the small spray of retardant that drifted over (just missing us), was all I needed... I was hooked on tankers.

By the 1980s I was photographing tankers out of Reno/Stead working large fires like the "Sparks/Mustang Fire" (18'000 acres) in 1981, and the "Zolezzi-Washoe fires" (8'000 acres).

The "Mitchell Canyon Fire" (14'000 acres) in 1984, got me my first look at the very different looking C-123, #63 operated by TBM. I was also lucky enough to photograph the mighty KC-97 (#84) on July 22, 1985, as she was working fires in Antelope Valley area north of Reno/Stead.

I obtained my driver's license and a new Canon AE-1 35 mm camera (which I still use to this day). The adventures would grow from here. As my adventures in the '90s would take me on missions to photograph every operational large tanker and get action shots on active fires.

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- Micah Johnson

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CalFire Tanker working on the Sherpa Fire. (credit Mike Elisason via Cal Fire)

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BY WES SCHULTZ

